E-Series 4-Way $0^{\circ}$ Power Divider
2-1000 MHZ

## Features

- Surface mount
- Wide frequency range
- 4-Way-0o
- Lead Free
- RoHS* Compliant and is $260^{\circ} \mathrm{C}$ reflow compatible.
- Available on Tape and Reel, reel quantity 2000


## Description

M/A-COM's MAPD-007246-ES4700 is a RoHS compliant 4 Way $0^{\circ}$ Power Divider in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Parts are packaged in tape \& reel.

## SM-46 package



Absolute Maximum Ratings ${ }^{1,2}$

| Parameter | Absolute Maximum |
| :---: | :---: |
| Maximum Power Rating | 1 Watt |
| Internal Load Dissipation | 0.125 Watt |
| Pin Temperature (10 Sec) | $260^{\circ} \mathrm{C}$ |
| Operating Temperature | $-0^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
| Operating Temperature ${ }^{2}$ | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Storage Temperature | $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$ |

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. $M / A-C O M$ does not recommend sustained operation near these survivability limits.

## Ordering Information

| Part Number | Package |
| :---: | :---: |
| MAPD-007246-ES4700 | 300 piece reel |

[^0]> This PRELIMINARY Data Sheet contains information regarding a product M/A-COM has under development. Performance is based on measured results and target specifications. Commitment to produce in volume is not guaranteed.

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology
Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples nar) tes a tar ay br av ilable

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E-Series 4-Way $0^{\circ}$ Power Divider
MAPD-007246-ES4700
2-1000 MHZ
Electrical Specifications: $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}, \mathrm{Z}_{0}=50 \Omega^{1}$

| Parameter | Test Conditions | Frequency | Units | Min | Typ | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RF Frequency | - | 2-1000 | MHz | - | - | - |
| Insertion Loss | $\mathrm{F}_{\mathrm{L}}-\mathrm{f}_{\mathrm{U}}$ | $\begin{gathered} 2-20 \\ 20-500 \\ 500-1000 \end{gathered}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \\ & \mathrm{~dB} \end{aligned}$ | - | $\begin{aligned} & 0.5 \\ & 0.7 \\ & 0.8 \end{aligned}$ | $\begin{aligned} & 0.8 \\ & 1.1 \\ & 1.5 \end{aligned}$ |
| Isolation | $\mathrm{F}_{\mathrm{L}}-\mathrm{f}_{\mathrm{U}}$ | $\begin{gathered} 2-20 \\ 20-500 \\ 500-1000 \end{gathered}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & 20 \\ & 20 \\ & 15 \end{aligned}$ | $\begin{aligned} & 35 \\ & 35 \\ & 23 \end{aligned}$ | - |
| Input \& Output Return Loss | $\mathrm{F}_{\mathrm{L}}-\mathrm{f}_{\mathrm{U}}$ | 2-1000 | dB | 15.0 | - | - |
| Amplitude Unbalance | $\mathrm{F}_{\mathrm{L}}-\mathrm{f}_{\mathrm{U}}$ | $\begin{gathered} 2-20 \\ 20-500 \\ 500-1000 \end{gathered}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \\ & \mathrm{~dB} \end{aligned}$ | - | - | $\begin{aligned} & 0.1 \\ & 0.2 \\ & 0.5 \end{aligned}$ |
| Phase Unbalance | $\mathrm{F}_{\mathrm{L}}$-fu | $\begin{gathered} 2-20 \\ 20-500 \\ 500-1000 \end{gathered}$ | Degrees Degrees Degrees | - | - | $\begin{gathered} 1^{\circ} \\ 5^{\circ} \\ 10^{\circ} \end{gathered}$ |


[^0]:    Note: Reference Application Note M513 for reel size information.

